CLAIMS

1. A method for viewing seismic data comprising:

   a. generating a prestack seismic display having a plurality of CMP gathers, wherein each gather has constant spatial coordinates associated therewith;

   b. for each CMP gather, defining a time or depth window around seismic data of interest;

   c. plotting said window in plan view using the spatial coordinates associated with said window to generate a multidimensional plan view.

2. The method of Claim 1 further comprising the step of overlaying the multidimensional plan view on a second seismic representation.

3. The method of Claim 2 wherein the second seismic representation is a contour map.

4. The method of Claim 1 further comprising the step of inserting the multidimensional plan view into an immersive environment.

5. A method for viewing seismic data related to a lithologic structure comprising:

   a. generating a poststack seismic display having a plurality of poststack traces around a point of interest, wherein each poststack trace has a constant spatial coordinates associated therewith:

   b. for each poststack trace, defining a time or depth window around seismic data of interest;

   c. plotting said window in plan view using the spatial coordinates associated with said window to generate a multidimensional plan view.

6. The method of Claim 1 further comprising the steps of analyzing trends in the data segments by viewing multiple segments in spatial relationship to one another.

7. A method for viewing seismic data having a plurality of dimensions associated therewith, said method comprising:

   a. presenting the seismic data in a multidimensional plan view.

8. The method of Claim 7 wherein said multidimensional plan view utilizes at least four dimensions.

9. The method of Claim 5 further comprising the steps of analyzing trends in the data segments by viewing multiple segments in spatial relationship to one another.